FILE 'CAPLUS' ENTERED AT 07:59:30 ON 16 MAY 2002

L1	983	S	PROANTHOCYANIDIN
L2	1	S	L1 AND RIBOSYLATION(W)INHIBITOR
L3	209	S	L1 AND PLANT
L4	0	S	L3 AND COMPOSIITION
L5	9	S	L3 AND COMPOSITION

L5 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 2001:766895 CAPLUS
DN 136:52981
TI **Composition** of Grape Skin Proanthocyanidins at Different Stages of Berry Development
AU Kennedy, James A.; Hayasaka, Yoji; Vidal, Stephane; Waters, Elizabeth J.; Jones, Graham P.
CS Department of Horticulture Viticulture and Oenology, Adelaide University, Glen Osmond, 5064, Australia
SO Journal of Agricultural and Food Chemistry (2001), 49(11), 5348-5355
CODEN: JAFCAU; ISSN: 0021-8561
PB American Chemical Society
DT Journal
LA English
RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
TI **Composition** of Grape Skin Proanthocyanidins at Different Stages of Berry Development
AB The compn. of grape (Vitis vinifera L. cv. Shiraz) skin proanthocyanidins was detd. at different stages of berry development. Beginning approx. 3 wk after fruit set and concluding at com. ripeness, the compn. of isolated skin proanthocyanidins was detd. using the following anal. techniques: elemental anal., UV-Vis absorption spectroscopy, reversed-phase HPLC after acid-catalysis in the presence of excess phloroglucinol, gel permeation chromatog., electrospray ionization mass spectrometry (ESI-MS), and 13C NMR. On the basis of these analyses, berry development was correlated with an increase in **proanthocyanidin** mean d.p., an increase in the proportion of (-)-epigallocatechin extension subunits, and increases in the level of anthocyanins assocd. with the **proanthocyanidin** fraction. Addnl., data acquired from ESI-MS of the isolates following acid-catalysis in the presence of excess phloroglucinol is consistent with pectin-bound proanthocyanidins.
ST grape skin **proanthocyanidin** compn berry development
IT Color
Grape
Growth and development, **plant**
(compn. of grape skin proanthocyanidins at different stages of berry development)
IT Growth and development, **plant**
(fruit ripening; compn. of grape skin proanthocyanidins at different stages of berry development)

L5 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 2001:706541 CAPLUS
DN 136:246718
TI **Proanthocyanidin composition** of red Vitis vinifera varieties from the Douro Valley during ripening: Influence of cultivation altitude
AU Mateus, Nuno; Marques, Sara; Goncalves, Ana C.; Machado, Jose M.; De Freitas, Victor
CS Departamento de Qulmica do Porto, Centro de Investigacao em Qulmica, Oporto, 4169-007, Port.
SO American Journal of Enology and Viticulture (2001), 52(2), 115-121
CODEN: AJEVAC; ISSN: 0002-9254
PB American Society for Enology and Viticulture
DT Journal
LA English
RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
TI **Proanthocyanidin composition** of red Vitis vinifera varieties from the Douro Valley during ripening: Influence of cultivation altitude
AB The effect of altitude and its related climatic conditions on the

proanthocyanidin compn. of Touriga Nacional and Touriga Francesa varieties during berry maturation is reported for the 1997 vintage. At berry maturation, low altitude is shown to be an important factor favoring the biosynthesis of higher concns. of grape-skin catechin monomers ((+)-catechin, (-)-epicatechin, (-)-epicatechin gallate), procyanidin dimers, trimer C1, as well as total extractable proanthocyanidins. The grapes (skin and seeds) of Touriga Nacional were richer in low mol. wt. flavan-3-ol compds., while Touriga Francesa contained higher concns. of total extractable proanthocyanidins. At harvest, grape-skin dimer content was comprised almost entirely of dimer B1, followed by dimers B2 and B3, whereas C4-C8 linked dimers (B1 to B4) and B2-gallate were the most abundant found in seeds. Dimer B2, which was one of the less important dimers at the early stage of development in seeds, showed a tendency to increase during ripening, while its resp. gallate ester (B2-gallate) markedly decreased.

ST **proanthocyanidin** compn red Vitis fruit ripening

IT Growth and development, **plant**
(fruit ripening; **proanthocyanidin** compn. of red Vitis vinifera varieties from Douro Valley during ripening)

IT Grape
(**proanthocyanidin** compn. of red Vitis vinifera varieties from Douro Valley during ripening)

IT Phenols, biological studies
Proanthocyanidins
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); BIOL (Biological study); OCCU (Occurrence)
(**proanthocyanidin** compn. of red Vitis vinifera varieties from Douro Valley during ripening)

IT 154-23-4, (+)-Catechin 490-46-0, (-)-Epicatechin 1257-08-5
1481-83-0D, Flavan-3-ol, derivs. 12798-57-1, Procyanidin B5
12798-58-2, Procyanidin B6 12798-59-3, Procyanidin B7 12798-60-6,
Procyanidin B8 20315-25-7, Procyanidin B1 23567-23-9, Procyanidin B3
29106-49-8, Procyanidin B2 29106-51-2, Procyanidin B4 73086-04-1
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); BIOL (Biological study); OCCU (Occurrence)
(**proanthocyanidin** compn. of red Vitis vinifera varieties from Douro Valley during ripening)

L5 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 2000:553206 CAPLUS
DN 133:155161
TI Cosmetic **composition** for protecting the scalp from free radicals
IN Herrling, Thomas; Groth, Norbert; Golz-Berner, Karin; Zastrow, Leonhard
PA Coty B. V., Neth.
SO Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DT Patent
LA German
IC ICM A61K007-40
ICS A61K007-48
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1025835	A2	20000809	EP 2000-250030	20000131
	EP 1025835	A3	20010801		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	DE 19905127	A1	20000810	DE 1999-19905127	19990201
PRAI	DE 1999-19905127	A	19990201		

TI Cosmetic **composition** for protecting the scalp from free radicals
AB The title compn. comprises an aq. dispersion, emulsion, or hydrogel contg. 0.5-30 wt.% enzymic radical scavenger and 0.1-20 wt.% water-sol. or -dispersible film-forming agent (shellac and/or dextrin). Thus, a radical scavenger complex comprised phospholipids 7, quebracho ext. (contg.

proanthocyanidin oligomers and gallic acid) 2, silkworm ext. (contg. cecropin, amino acids, and vitamins) 1, acerola (Malpighia punicifolia) fruit ext. 1, vitamin C 0.5, and vitamin A 0.5% in a gel base contg. Carbomer, EtOH, and glycerin. This complex 30.0, .alpha.-dextrin 5.0, .beta.-dextrin 2.5, .gamma.-dextrin 5.0, preservative 0.5, and H2O to 100 wt.% were combined to produce a scalp spray.

IT **Plant** (Embryophyta)
Yeast
(radical scavengers from; cosmetic compn. for protecting the scalp from free radicals)

L5 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 1998:268176 CAPLUS
DN 129:80945
TI Chemical **composition**, rumen degradation, and gas production characteristics of some multipurpose fodder trees and shrubs during wet and dry seasons in the humid tropics
AU Larbi, A.; Smith, J. W.; Kurdi, I. O.; Adekunle, I. O.; Raji, A. M.; Ladipo, D. O.
CS Humid Zone Programme, International Livestock Research Institute (ILRI), Ibadan, Nigeria
SO Animal Feed Science and Technology (1998), 72(1-2), 81-96
CODEN: AFSTDH; ISSN: 0377-8401
PB Elsevier Science B.V.
DT Journal
LA English
TI Chemical **composition**, rumen degradation, and gas production characteristics of some multipurpose fodder trees and shrubs during wet and dry seasons in the humid tropics
AB Seasonal variations in chem. compn., dry matter (DM) and nitrogen (N) degrdn., and gas prodn. characteristics of 18 multipurpose trees and shrubs (MPTs) from the humid lowlands of West Africa were evaluated. The MPTs have potential for the development of integrated crop and livestock agroforestry technologies in the region. The expt. was conducted in Ibadan, southwestern Nigeria during the main-wet (Apr.-August) and dry (Dec.-Mar.) seasons. The MPTs were ranked by their degrdn. and gas prodn. characteristics, and these were found to be related to chem. compn. There were wide variations among MPTs in crude protein (CP), neutral detergent fiber (NDF), acid detergent fiber (ADF) and **proanthocyanidin** contents, DM and N degrdn., and gas prodn. characteristics. Dry matter degrdn. during the dry season ranged from 416 to 868 g kg-1 and for N 508 to 950 g kg-1. Crude protein, and rates of DM and N degrdn. were significantly correlated (r=0.48, P=0.037 for DM and r=0.56, P=0.032 for N). The rates and extents of DM and N degrdn. were significantly correlated with NDF and ADF during the wet season (r=-0.47 to -0.63). The vol. of gas produced (r=-0.48 to -0.67) and initial gas prodn. (r=-0.64 to -0.73) were highly correlated with the NDF and ADF in both seasons. The rate of DM degrdn. was significantly correlated with gas prodn. variables in the minor-wet season. Ranking of the MPTs based on extent of DM and N degrdn., and vol. of gas produced for the main-wet and dry seasons were highly correlated. Based on degrdn. and gas prodn. characteristics in the main-wet and the dry seasons, F. exasperata, S. nodosa, S. siamea, S. spectabilis, G. sepium, L. leucocephala and L. diversifolia were superior in quality to M. thonningii, A. angustissima and P. pterocarpum.

IT Dietary fiber
Forage
Plant (Embryophyta)
Tree
(chem. compn., rumen degrdn., and gas prodn. characteristics of some multipurpose fodder trees and shrubs during wet and dry seasons in the humid tropics)

L5 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 1996:713825 CAPLUS

DN 126:17935
TI Determination of the **composition** of commercial tannin extracts by liquid secondary ion mass spectrometry (LSIMS)
AU Vivas, Nicolas; Bourgeois, Guy; Vitry, Christiane; Glories, Yves; de Freitas, Victor
CS Faculte d'OEnologie, Univ. Victor Segalen, Talence, 33405, Fr.
SO J. Sci. Food Agric. (1996), 72(3), 309-317
CODEN: JSFAAE; ISSN: 0022-5142
PB Wiley
DT Journal
LA English
TI Determination of the **composition** of commercial tannin extracts by liquid secondary ion mass spectrometry (LSIMS)
AB The compns. of various com. tannin exts. were detd. by liq. secondary ion mass spectrometry (LSIMS). Spectra were obtained directly from tannin exts. without any pre-sepn. Eight different tannin powders were analyzed: three gallotannins (Chinese, Turkish, tara), three ellagitannins (sweet chestnut, pendunculata oak, sessile oak), one mixed hydrolysable tannin (myrabolans) and one **proanthocyanidin** (grape seeds). This method enabled the main mols. in these powders to be identified.
ST tannin detn **plant** source liq SIMS; secondary ion mass spectrometry tannin

L5 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 1994:187333 CAPLUS
DN 120:187333
TI Developmental changes in the concentration and **composition** of flavonoids in skin of a red and a green apple cultivar
AU Lister, Carolyn E.; Lancaster, Jane E.; Sutton, Kevin H.; Walker, John R. L.
CS Plant Improv. Div., N Z Inst. Crop and Food Res. Ltd., Christchurch, N. Z.
SO J. Sci. Food Agric. (1994), 64(2), 155-61
CODEN: JSFAAE; ISSN: 0022-5142
DT Journal
LA English
TI Developmental changes in the concentration and **composition** of flavonoids in skin of a red and a green apple cultivar
AB Flavonoids from the skin of Granny Smith, a green apple cultivar, and Splendour, a red apple cultivar, were quantified by high-performance liq. chromatog. for two seasons (1989-1990 and 1990-1991). Both cultivars contained a similar compn. and concn. of quercetin glycosides and proanthocyanidins. Splendour also synthesized cyanidin glycosides during ripening. Quercetin glycosides and proanthocyanidins were highest in the skin of very young fruit of Granny Smith and decreased by 50% during fruit development. In Splendour, concns. of quercetin glycosides and proanthocyanidins in the skin decreased by 50% from early to mid-season but then increased during ripening. Cyanidin glycosides in Splendour increased to about 1 mg g-1 fresh wt. during ripening. There were significant differences between the two cultivars but not between years. Total amt. of flavonoids increased throughout the season as fruit surface area increased. For Granny Smith there was an estd. net synthesis per apple of 0.16 mg day-1 quercetin glycosides, 0.1 mg day-1 proanthocyanidins and for Splendour a net synthesis per apple of 0.28 mg day-1 quercetin glycosides, 0.21 mg day-1 proanthocyanidins and during ripening 0.21 mg day-1 cyanidin glycosides. Relative proportions of major quercetin glycosides and proanthocyanidins were stable during fruit development. For Splendour, however, cyanidin glycoside synthesis was accompanied by a corresponding increase in quercetin glycoside and **proanthocyanidin** synthesis. The data suggest a coordinate regulation of enzymes in the flavonoid biosynthetic pathway during fruit development.
IT **Plant** growth and development
(fruit-ripening, flavonoids of red and green apple cultivars during)

L5 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 1993:445347 CAPLUS
DN 119:45347
TI Developmental changes in the **composition** of proanthocyanidins from leaves of sainfoin (Onobrychis viciifolia Scop.) as determined by HPLC analysis
AU Koupai-Abyazani, Mohammed R.; McCallum, John; Muir, Alister D.; Bohm, Bruce A.; Towers, G. H. N.; Gruber, Margaret Y.
CS Dep. Bot., Univ. British Columbia, Vancouver, BC, V6T 1Z4, Can.
SO J. Agric. Food Chem. (1993), 41(7), 1066-70
CODEN: JAFCAU; ISSN: 0021-8561
DT Journal
LA English
TI Developmental changes in the **composition** of proanthocyanidins from leaves of sainfoin (Onobrychis viciifolia Scop.) as determined by HPLC analysis
AB **Proanthocyanidin** (PA) polymer (condensed tannins) were extd. from sainfoin leaves (O. vicifolia) at different stages of **plant** development. Anal. of the phloroglucinol degrdn. products by HPLC showed that catechin, epicatechin, gallocatechin, and epigallocatechin were present as terminal units at all stages, while gallocatechin and epigallocatechin were the predominant extension units with lesser amts. of epicatechin incorporated at early stages. Catechin was not incorporated as an extension unit. The no.-av. mol. wt. and d.p. increased with leaf development. There was a very distinct change in the isomerization and degree of hydroxylation of the polymer constituents with development. The compn. of cis-isomers decreased from 83 to 48% and the proportion of trihydroxylated B-rings increased from 60 to 90% with increasing leaf maturity.
ST sainfoin **proanthocyanidin** development
IT **Plant** growth and development
(proanthocyanidins of sainfoin in relation to)

L5 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 1988:19211 CAPLUS
DN 108:19211
TI Chemical **composition** of barley varieties with different nutrient supplies. III. Concentration of tannins and .beta.-glucans in two-year experiments
AU Truelsen, Ebbe
CS Res. Cent. Agric., Dan. Res. Serv. Plant Soil Sci., Lyngby, DK-2800, Den.
SO Tidsskr. Planteavl (1987), 91(1), 69-76
CODEN: TPLAAV; ISSN: 0040-7135
DT Journal
LA English
TI Chemical **composition** of barley varieties with different nutrient supplies. III. Concentration of tannins and .beta.-glucans in two-year experiments
AB Twenty barley varieties were grown in 1982 and 1983, and 21 varieties, including a breeding line Ca 700202, were grown in 1984 and 1985 in pots with increasing N supplies. The concns. of tannins and sol. .beta.-glucans were detd. in the mature grains. The contents of tannins and .beta.-glucans were closely connected to the varieties, therefore highly significant correlations could be calcd. between the two years of expts. Only a low pos. reaction for tannin was found in the **proanthocyanidin**-free variety Galant, but Cerise, Carina, Ca 700202 and Claret also had fairly low tannin contents. Significant differences between the two years were found in tannin contents. The lowest content of sol. .beta.-glucans was found in the breeding line Ca 700202 and the varieties Triumph, Mandolin and Yriba. No significant differences could be found in the content of .beta.-glucans between the two years. Increasing supplies of N caused increases in the content of sol. .beta.-glucans, whereas only small changes in the content of tannins were found.

IT **Plant** breeding and selection
(of barley, glucans and tannin content in relation to)

L5 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 1983:555346 CAPLUS
DN 99:155346
TI Proanthocyanidins of barley and sorghum; **composition** as a function of maturity of barley ears
AU Brandon, Michael J.; Foo, Lai Yeap; Porter, Lawrence J.; Meredith, Peter
CS Dep. Sci. Ind. Res., Wheat Res. Inst., Petone, N. Z.
SO Phytochemistry (1982), 21(12), 2953-7
CODEN: PYTCAS; ISSN: 0031-9422
DT Journal
LA English
TI Proanthocyanidins of barley and sorghum; **composition** as a function of maturity of barley ears
AB Sorghum vulgare Seeds contain a **proanthocyanidin** polymer consisting largely of 2,3-cis procyanidin units with no.-av. mol. wt. 2500. Hordeum vulgare Ears contain low levels of **proanthocyanidin** oligomers contg. 2-4 units, and composed largely of 2,3-trans procyanidin and prodelphinidin units, with catechin as the terminal unit. The concn. of the oligomers in barley ears was const. throughout the 33-day growth and ripening period.
ST **proanthocyanidin** barley sorghum maturation; tannin condensed barley sorghum
IT **Plant** growth and development
(proanthocyanidins during, of barley)

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NEWS 2	Jan 25	BLAST(R) searching in REGISTRY available in STN on the Web
NEWS 3	Jan 29	FSTA has been reloaded and moves to weekly updates
NEWS 4	Feb 01	DKILIT now produced by FIZ Karlsruhe and has a new update frequency
NEWS 5	Feb 19	Access via Tymnet and SprintNet Eliminated Effective 3/31/02
NEWS 6	Mar 08	Gene Names now available in BIOSIS
NEWS 7	Mar 22	TOXLIT no longer available
NEWS 8	Mar 22	TRCTHERMO no longer available
NEWS 9	Mar 28	US Provisional Priorities searched with P in CA/CAplus and USPATFULL
NEWS 10	Mar 28	LIPINSKI/CALC added for property searching in REGISTRY
NEWS 11	Apr 02	PAPERCHEM no longer available on STN. Use PAPERCHEM2 instead.
NEWS 12	Apr 08	"Ask CAS" for self-help around the clock
NEWS 13	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 14	Apr 09	ZDB will be removed from STN
NEWS 15	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 16	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 17	Apr 22	BIOSIS Gene Names now available in TOXCENTER
NEWS 18	Apr 22	Federal Research in Progress (FEDRIP) now available

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FILE COVERS 1907 - 16 May 2002 VOL 136 ISS 20
FILE LAST UPDATED: 14 May 2002 (20020514/ED)

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```
=> s inhibitor
        379881 INHIBITOR
        401899 INHIBITORS
L1      619425 INHIBITOR
                 (INHIBITOR OR INHIBITORS)

=> s l1 and ribosylation
          5143 RIBOSYLATION
            30 RIBOSYLATIONS
          5146 RIBOSYLATION
                 (RIBOSYLATION OR RIBOSYLATIONS)
L2         835 L1 AND RIBOSYLATION

=> s l2 and ADP
         52454 ADP
            65 ADPS
         52487 ADP
                 (ADP OR ADPS)
L3         768 L2 AND ADP

=> s l3 and composition
        587900 COMPOSITION
        235499 COMPOSITIONS
        819660 COMPOSITION
                 (COMPOSITION OR COMPOSITIONS)
       1148107 COMPN
        449414 COMPNS
       1399752 COMPN
                 (COMPN OR COMPNS)
       1831873 COMPOSITION
                 (COMPOSITION OR COMPN)
L4           48 L3 AND COMPOSITION

=> s l4 and diptheria
          124 DIPTHERIA
L5          0 L4 AND DIPTHERIA
```

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=> s l4 and treatment
        1660788 TREATMENT
         155039 TREATMENTS
        1746876 TREATMENT
                  (TREATMENT OR TREATMENTS)
L6           12 L4 AND TREATMENT

=> s l5 and diphtheria
           7107 DIPHTHERIA
L7            0 L5 AND DIPHTHERIA

=> s l6 and diphtheria
           7107 DIPHTHERIA
L8            1 L6 AND DIPHTHERIA

=> s l6 and pertussis
          12930 PERTUSSIS
L9            6 L6 AND PERTUSSIS

=> s l6 and tetanus
           7471 TETANUS
              2 TETANUSES
           7472 TETANUS
                  (TETANUS OR TETANUSES)
L10           1 L6 AND TETANUS

=> s l6 and infection
         166376 INFECTION
          50619 INFECTIONS
         193216 INFECTION
                  (INFECTION OR INFECTIONS)
L11           0 L6 AND INFECTION

=> s l4 and enterotoxin
           6778 ENTEROTOXIN
           3001 ENTEROTOXINS
           7348 ENTEROTOXIN
                  (ENTEROTOXIN OR ENTEROTOXINS)
L12           1 L4 AND ENTEROTOXIN

=> dis hist

     (FILE 'HOME' ENTERED AT 08:38:59 ON 16 MAY 2002)

     FILE 'CAPLUS' ENTERED AT 08:39:13 ON 16 MAY 2002
L1         619425 S INHIBITOR
L2            835 S L1 AND RIBOSYLATION
L3            768 S L2 AND ADP
L4             48 S L3 AND COMPOSITION
L5              0 S L4 AND DIPTHERIA
L6             12 S L4 AND TREATMENT
L7              0 S L5 AND DIPHTHERIA
L8              1 S L6 AND DIPHTHERIA
L9              6 S L6 AND PERTUSSIS
L10             1 S L6 AND TETANUS
L11             0 S L6 AND INFECTION
L12             1 S L4 AND ENTEROTOXIN

=> dis l12 bib abs

L12  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2002 ACS
AN   1992:442296  CAPLUS
DN   117:42296
TI   Nucleotide regulation of heat-stable enterotoxin receptor
     binding and of guanylate cyclase activation
```

AU Katwa, Laxmansa C.; Parker, Charlotte D.; Dybing, Jody K.; White, Arnold A.
CS John M. Dalton Res. Cent., Univ. Missouri, Columbia, MO, 65211, USA
SO Biochem. J. (1992), 283(3), 727-35
CODEN: BIJOAK; ISSN: 0306-3275
DT Journal
LA English
AB Certain nucleotides were found to regulate the binding of the Escherichia coli heat-stable **enterotoxin** (STa) to its receptor in pig intestinal brush border membranes. ATP and adenine nucleotide analogs inhibited 125I-STa binding, while guanine nucleotide analogs stimulated binding, with maximal effects at 0.5-1.0 mM. The strongest **inhibitors** were adenosine 5'-[.beta..gamma.-imido]triphosphate (App[NH]p) (36%) and adenosine 5'-[.beta.-thio]diphosphate (**ADP** [S]) (41%). Inhibition did not require Mg2+, and was blocked by p-chloromercuribenzenesulfonate (PCMBS). Stimulation of binding required Mg2+, was not prevented by PCMBS, and was maximal with GDP[S] (41%). While App[NH]p and MgGDP[S] appeared to be acting at different sites, they also interfered with each other. These nucleotides exerted only inhibitory effects on STa-stimulated guanylate cyclase activity, in contrast with the stimulatory effects of adenine nucleotides on atrial natriuretic peptide-stimulated guanylate cyclase. Inhibition by low concns. of MgApp[NH]p and MgATP was weaker above 0.1 mM, while MgGDP[S] and magnesium guanosine 5'-[.gamma.-thiol]triphosphate (MgGTP[S]) inhibited in a single phase. Inhibition by MgApp[NH]p, at all concns., was competitive with the substrate (MgGTP), as was that by MgGDP[S] and MgGTP[S]. Whereas membrane guanylate cyclases usually show pos. co-operative kinetics with respect to the substrate, STa-stimulated activity exhibited Michaelis-Menten kinetics with respect to MgGTP. This changed to pos. co-operativity when Lubrol PX was the activator, or when the substrate was MnGTP. These results suggest the presence of both a regulatory and a catalytic nucleotide-binding site, which do not interact co-operatively with STa activation.

=> dis l10 bib abs

L10 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
AN 2001:380730 CAPLUS
DN 134:348261
TI Fusion proteins that specifically inhibit protein synthesis in neuronal cells
IN Francis, Jonathan W.; Brown, Robert H., Jr.; Murphy, John R.; Vanderspek, Johanna C.; Oyler, George
PA The General Hospital Corporation, USA; Trustees of Boston University; University of Maryland, Baltimore
SO PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001036588	A2	20010525	WO 2000-US31680	20001116

W: CA, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

PRAI US 1999-165807P P 19991116
AB This invention relates to **compns**. and methods for the specific inhibition of protein synthesis in neuronal cells leading to neuronal cell death. More specifically, the invention relates to hybrid protein mols. that show high specificity for, and increased cytotoxicity in, neuronal cells. Such hybrid mols. are useful in a variety of conditions where localized inhibition of neuronal cell function is desirable. A fusion gene encoding the first 388 amino acids of diphtheria toxin linked to

tetanus toxin fragment C was constructed, expressed in Escherichia coli strain BL21(DE3) and purified. Following overnight **treatment** of cultured striatal neurons or N18-RE-105 cells with various concns. of the chimeric toxin, the chimeric toxin was shown to be a potent **inhibitor** of cellular protein synthesis.

=> dis l9 1-6 bib abs

L9 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2002 ACS
AN 1999:795640 CAPLUS
DN 132:44996
TI Wound **treatment** through inhibition of adenosine diphosphate ribosyl transferase
IN Leibovich, Samuel J.
PA University of Medicine and Dentistry of New Jersey, USA
SO PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9963982	A1	19991216	WO 1999-US13264	19990611
	W: AU, CA, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2329160	AA	19991216	CA 1999-2329160	19990611
	AU 9944383	A1	19991230	AU 1999-44383	19990611
	EP 1085859	A1	20010328	EP 1999-927490	19990611
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI	US 1998-88924P	P	19980611		
	WO 1999-US13264	W	19990611		

AB A method is disclosed for healing a wound in a mammal which comprises (A) providing a therapeutic wound healing **compn.** comprising a therapeutically effective amt. of an **inhibitor** of mono-**ADP**-ribosyl transferase to inhibit **ADP-ribosylation** of vascular endothelial growth factor, and (B) contacting the therapeutic wound healing **compn.** with a wound in a mammal. Also disclosed are wound healing **compns.** and methods for prepg. and using the wound healing **compns.** and the pharmaceutical products in which the therapeutic **compns.** may be used. Further disclosed are therapeutic dermatol.-wound healing **compns.** useful to minimize and treat diaper dermatitis and methods for prepg. and using the therapeutic dermatol.-wound healing **compns.**

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2002 ACS
AN 1992:4569 CAPLUS
DN 116:4569
TI Determination of G-protein levels, **ADP-ribosylation** by cholera and **pertussis** toxins and the regulation of adenylyl cyclase activity in liver plasma membranes from lean and genetically diabetic (db/db) mice
AU Palmer, Timothy M.; Houslay, Miles D.
CS Inst. Biochem., Univ. Glasgow, Glasgow, G12 8QQ, UK
SO Biochim. Biophys. Acta (1991), 1097(3), 193-204
CODEN: BBACAQ; ISSN: 0006-3002
DT Journal
LA English
AB Liver plasma membranes prepd. from genetically diabetic (db/db) mice expressed levels of Gi .alpha.-2, Gi .alpha.-3 and G-protein

.beta.-subunits that were reduced by some 75, 63 and 73% compared with levels seen in membranes from lean animals. In contrast, there were no significant differences in the expression of the 42 and 45 kDa forms of Gs .alpha.-subunits. **Pertussis** toxin-catalyzed **ADP-ribosylation** of membranes from lean animals identified a single 41 kDa band whose labeling was reduced by some 86% in membranes from diabetic animals. Cholera toxin-catalyzed **ADP-ribosylation** identified two forms of Gs .alpha.-subunits whose labeling was about 4-fold greater in membranes from diabetic animals compared with those from lean animals. Maximal stimulations of adenylyl cyclase activity by forskolin (100 .mu.M), GTP (100 .mu.M), p[NH]ppG (100 .mu.M), NaF (10 mM) and glucagon (10 .mu.M) were similar in membranes from lean and diabetic animals, whereas stimulation by isoprenaline (100 .mu.M) was lower by about 22%. Lower concns. (EC50-60 nM) of p[NH]ppG were needed to activate adenylyl cyclase in membranes from diabetic animals compared to those from lean animals (EC50-158 nM). As well as causing activation, p[NH]ppG was capable of eliciting a **pertussis** toxin-sensitive **inhibitor** effect upon forskolin-stimulated adenylyl cyclase activity in membranes from both lean and diabetic animals. However, maximal inhibition of adenylyl cyclase activity in membranes from diabetic animals was reduced to around 60% of that found using membranes from lean animals. **Pertussis** toxin-**treatment** in vivo enhanced maximal stimulation of adenylyl cyclase by glucagon, isoprenaline and p[NH]ppG through a process suggested to be mediated by the abolition of functional Gi activity. The lower levels of expression of G-protein .beta.-subunits, in membranes from diabetic compared with lean animals, is suggested to perturb the equil. between holomeric and dissocd. G-protein subunits. It is proposed that this may explain both the enhanced sensitivity of adenylyl cyclase to stimulation by p[NH]ppG in membranes from diabetic animals and the altered ability of **pertussis** and cholera toxins to catalyze the **ADP-ribosylation** of G-proteins in membranes from these two animals.

L9 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2002 ACS
AN 1991:527584 CAPLUS
DN 115:127584
TI Glucocorticoid receptor activation leads to up-regulation of adenosine A1 receptors and down-regulation of adenosine A2 responses in DDT1 MF-2 smooth muscle cells
AU Gerwins, Paer; Fredholm, Bertil B.
CS Dep. Pharmacol., Karolinska Inst., Stockholm, S-104 01, Swed.
SO Mol. Pharmacol. (1991), 40(2), 149-55
CODEN: MOPMA3; ISSN: 0026-895X
DT Journal
LA English
AB The effect of glucocorticoid **treatment** of DDT1 MF-2 smooth muscle cells on the signaling via 2 adenosine receptors with opposing actions on cAMP generation was examd. **Treatment** with dexamethasone caused a dose- and time-dependent increase in the no. of adenosine A1 receptors but did not affect the KD or the proportions of receptors in high and low affinity states. The EC50 was 1 nM dexamethasone, and maximal response was achieved after 24 h. The no. of receptors was increased by approx. 50%. Other steroid hormones, including aldosterone, progesterone, testosterone, and estrogen, were much less effective, and addn. of the glucocorticoid receptor antagonist RU 486 or the protein synthesis **inhibitor** cycloheximide prevented the up-regulation, showing that the effect was mediated via a glucocorticoid receptor-specific mechanism that involves protein synthesis. In dexamethasone-treated cells the A1 receptor agonist (-)-N6-phenylisopropyladenosine [(R)-PIA] was 3-times more potent as an **inhibitor** of cAMP formation induced by isoprenaline than in untreated cells. **ADP ribosylation** of inhibitory GTP-binding proteins by **pertussis** toxin completely prevented (R)-PIA from inhibiting cAMP accumulation. A further anal. of the different GTP-binding proteins, including the 3 Gi subtypes (Gi1, Gi2, and

Gi3), revealed no quant. or qual. change after dexamethasone **treatment**. In addn., the adenosine A2 receptors were down-regulated, as indicated by the fact that the ability of the A2 receptor agonist 5'-N-ethylcarboxamidoadenosine to increase cAMP formation was decreased by 20-30% in dexamethasone-treated cells. In summary, A1 and A2 receptors on the same cell are differentially regulated by glucocorticoids and this has functional importance in the regulation of cAMP accumulation.

L9 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2002 ACS
AN 1991:119555 CAPLUS
DN 114:119555
TI Mechanism of cytokine inhibition of .beta.-adrenergic agonist stimulation of cyclic AMP in rat cardiac myocytes. Impairment of signal transduction
AU Chung, Mina K.; Gulick, Tod S.; Rotondo, Russell E.; Schreiner, George F.; Lange, Louis G.
CS Med. Cent., Washington Univ., St. Louis, MO, 63110, USA
SO Circ. Res. (1990), 67(3), 753-63
CODEN: CIRUAL; ISSN: 0009-7330
DT Journal
LA English
AB Activated immune cells produce a sol. **inhibitor** of cardiac myocyte contractile and cAMP (cAMP) responses to .beta.-adrenergic stimulation. To examine the mechanics of this effect, metabolic assays were conducted on cultured rat cardiac myocytes incubated in the presence and absence of supernatants harvested from rat activated splenocyte cultures. Intracellular cAMP accumulation in response to isoproterenol was inhibited by up to 74% in a dose-dependent fashion by conditioned media contg. sol. cytokines from activated immune cells. By use of myocyte cultures in which contaminating non-myocyte proliferation was inhibited by nonlethal irradn., this phenomenon was shown to be independent of mitogenic effects. Isobutylmethylxanthine, a phosphodiesterase **inhibitor**, did not ablate cytokine-induced inhibition of cAMP accumulation. Parameters of .beta.-adrenergic receptor binding and affinity were also unaffected. CAMP suppression was maintained after cholera toxin stimulation of cAMP prodn. via stimulatory G protein **ADP-ribosylation**. CAMP inhibition was not apparent when cells were stimulated with forskolin, a direct adenylate cyclase activator. Importantly, **pertussis** toxin **treatment** significantly ablated cytokine-induced cAMP inhibition. Thus, interference with agonist-occupied .beta.-adrenergic receptor coupling to adenylate cyclase to produce cAMP and subsequent contractile responses is induced by a factor(s) elaborated by activated immune cells. This interference occurs at the level of signal transduction across the membrane, can be overridden by **pertussis** toxin, and may involve changes in the coupling of the stimulatory/inhibitory G proteins to adenylate cyclase. These results demonstrate a novel mechanism of cytokine-induced myocyte dysfunction and may have important pathophysiol. ramifications in immune-mediated myocardial diseases.

L9 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2002 ACS
AN 1990:491555 CAPLUS
DN 113:91555
TI Pseudomonas exotoxin A prevents .beta.-adrenoceptor-induced up-regulation of Gi protein .alpha.-subunits and adenylyl cyclase desensitization in rat heart muscle cells
AU Reithmann, Christopher; Gierschik, Peter; Mueller, Ursula; Werdan, Karl; Jakobs, Karl H.
CS Pharmakol. Inst., Univ. Heidelberg, Heidelberg, D-6900, Fed. Rep. Ger.
SO Mol. Pharmacol. (1990), 37(5), 631-8
CODEN: MOPMA3; ISSN: 0026-895X
DT Journal
LA English
AB Exposure of rat heart muscle cells to noradrenaline (1 .mu.M) for 48 h led to a decrease in the no. of .beta.1-adrenoceptors of 50% and a concomitant

decrease in adenylyl cyclase stimulation by isoprenaline and forskolin of .apprx.60 and 30%, resp. In addn., the levels of 2 **inhibitor** guanine nucleotide-binding protein (Gi protein) .alpha.-subunits (Gi.alpha.40 and Gi.alpha.41) were increased in membranes of noradrenaline-treated cells. Evidence is presented that noradrenaline induces this increase by activation of .beta.-adrenoceptors. First, the noradrenaline action was mimicked by the .beta.-adrenoceptor agonist isoprenaline. Second, .beta.-adrenoceptor blockade by timolol but not .alpha.-adrenoceptor blockade by prazosin prevented the noradrenaline-induced up-regulation of Gi.alpha. proteins. Furthermore, timolol but not prazosin abolished the noradrenaline-induced down-regulation of .beta.1-adrenoceptors and the decreases in receptor-dependent (isoprenaline) and -independent (forskolin) adenylyl cyclase stimulation. The specific protein synthesis **inhibitor** Pseudomonas exotoxin A was used to study whether the noradrenaline-induced up-regulation of Gi .alpha.-subunits depends on increased synthesis of these proteins. This toxin inhibits peptide chain elongation by **ADP**-ribosylating elongation factor 2. **Treatment** of rat heart muscle cells with Pseudomonas exotoxin A (1 ng/mL) completely prevented the noradrenaline-induced increase in Gi.alpha. proteins, measured by both **pertussis** toxin-catalyzed **ADP-ribosylation** and immunoblotting with anti-gi.alpha. antibodies. Most importantly, Pseudomonas exotoxin A also completely prevented the noradrenaline-induced decrease in forskolin-stimulated adenylyl cyclase activity. Furthermore, the noradrenaline-induced decrease in isoprenaline-stimulated adenylyl cyclase activity was significantly attenuated by the toxin although the down-regulation of .beta.1-adrenoceptors caused by noradrenaline **treatment** was not affected. The data presented suggest that prolonged activation of .beta.-adrenoceptors in rat heart muscle cells, in addn. to causing a receptor down-regulation, induced the synthesis of Gi.alpha. proteins, which then apparently mediate a decreased adenylyl cyclase responsiveness. The data, addnl., suggest that the synthesis of Gi.alpha. proteins is under control of the activity of the adenylyl cyclase system and that altered levels of these proteins may play a major role in long term regulation of signal transduction by this enzyme.

L9 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2002 ACS
AN 1987:150273 CAPLUS
DN 106:150273
TI Neuropeptide Y inhibits cardiac adenylate cyclase through a **pertussis** toxin-sensitive G protein
AU Kassis, Shouki; Olasmaa, Marjut; Terenius, Lars; Fishman, Peter H.
CS Membrane Biochem. Sect., Natl. Inst. Neurol. Commun. Dis. Stroke, Bethesda, MD, 20892, USA
SO J. Biol. Chem. (1987), 262(8), 3429-31
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English
AB Neuropeptide Y [82785-45-3], a major neuropeptide and potent vasoconstrictor, inhibited (-)-isoproterenol [51-31-0]-stimulated adenylate cyclase [9012-42-4] activity in cultured rat atrial cells as well as in atrial membranes. Prior **treatment** of the cells with **pertussis** toxin blocked the inhibitory action of neuropeptide Y. **Pertussis** toxin is known to uncouple the receptors for other **inhibitors** of adenylate cyclase by **ADP-ribosylation** of the .alpha.-subunit of Gi, the inhibitory guanine nucleotide-binding component of adenylate cyclase. The toxin specifically catalyzed the **ADP-ribosylation** of a 41-kilodalton atrial membrane protein which corresponded to the Gi subunit. Thus, neuropeptide Y may mediate some of its physiol. effects through specific receptors linked to the inhibitory pathway of adenylate cyclase.

=> dis l8 bib abs

L8 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
AN 2001:380730 CAPLUS
DN 134:348261
TI Fusion proteins that specifically inhibit protein synthesis in neuronal cells
IN Francis, Jonathan W.; Brown, Robert H., Jr.; Murphy, John R.; Vanderspek, Johanna C.; Oyler, George
PA The General Hospital Corporation, USA; Trustees of Boston University; University of Maryland, Baltimore
SO PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001036588	A2	20010525	WO 2000-US31680	20001116
	W: CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
PRAI	US 1999-165807P	P	19991116		

AB This invention relates to **compns**. and methods for the specific inhibition of protein synthesis in neuronal cells leading to neuronal cell death. More specifically, the invention relates to hybrid protein mols. that show high specificity for, and increased cytotoxicity in, neuronal cells. Such hybrid mols. are useful in a variety of conditions where localized inhibition of neuronal cell function is desirable. A fusion gene encoding the first 388 amino acids of **diphtheria** toxin linked to tetanus toxin fragment C was constructed, expressed in Escherichia coli strain BL21(DE3) and purified. Following overnight **treatment** of cultured striatal neurons or N18-RE-105 cells with various concns. of the chimeric toxin, the chimeric toxin was shown to be a potent **inhibitor** of cellular protein synthesis.

=> dis hist

(FILE 'HOME' ENTERED AT 08:38:59 ON 16 MAY 2002)

FILE 'CAPLUS' ENTERED AT 08:39:13 ON 16 MAY 2002
L1 619425 S INHIBITOR
L2 835 S L1 AND RIBOSYLATION
L3 768 S L2 AND ADP
L4 48 S L3 AND COMPOSITION
L5 0 S L4 AND DIPTHERIA
L6 12 S L4 AND TREATMENT
L7 0 S L5 AND DIPHTHERIA
L8 1 S L6 AND DIPHTHERIA
L9 6 S L6 AND PERTUSSIS
L10 1 S L6 AND TETANUS
L11 0 S L6 AND INFECTION
L12 1 S L4 AND ENTEROTOXIN

=> s l4 and proanthocyanidin
983 PROANTHOCYANIDIN
1799 PROANTHOCYANIDINS
1920 PROANTHOCYANIDIN
(PROANTHOCYANIDIN OR PROANTHOCYANIDINS)
L13 1 L4 AND PROANTHOCYANIDIN

=> s l3 and proanthocyanidin
983 PROANTHOCYANIDIN
1799 PROANTHOCYANIDINS
1920 PROANTHOCYANIDIN

(PROANTHOCYANIDIN OR PROANTHOCYANIDINS)
L14 1 L3 AND PROANTHOCYANIDIN

=> dis l4 bib abs

L4 ANSWER 1 OF 48 CAPLUS COPYRIGHT 2002 ACS
AN 2002:185378 CAPLUS
DN 136:212896
TI Gene markers useful for detecting skin damage in response to ultraviolet radiation
IN Blumenberg, Miroslav
PA New York University School of Medicine, USA
SO PCT Int. Appl., 274 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002020849	A2	20020314	WO 2001-US28214	20010907
W: AU, CA, JP, SG				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
PRAI US 2000-231061P	P	20000908		

AB The cellular response to UV radiation exposure has been characterized on the mol. level through the use of high d. gene array technol. Nucleic acid mols. and protein mols., the expression of which are repressed or induced in response to UV radiation exposure, are identified according to a temporal pattern of altered expression post UV radiation exposure. Methods are disclosed that utilized these UV radiation-regulated mols. as markers for UV radiation exposure. Other screening methods of the invention are designed for the identification of compds. that modulate the response of a cell to UV radiation exposure. The invention also provides **compns**. useful for drug screening or pharmaceuticals purposes.

=> dis l3 bib abs

L3 ANSWER 1 OF 768 CAPLUS COPYRIGHT 2002 ACS
AN 2002:351551 CAPLUS
TI Regulation and recruitment of phosphatidylinositol 4-kinase on immature secretory granules is independent of **ADP-ribosylation** factor 1
AU Panaretou, Christina; Tooze, Sharon A.
CS The Secretory Pathways Laboratory, Cancer Research UK London Institute, London, WC2A 3PX, UK
SO Biochemical Journal (2002), 363(2), 289-295
CODEN: BIJOAK; ISSN: 0264-6021
PB Portland Press Ltd.
DT Journal
LA English
AB Heterotrimeric G-proteins, as well as small GTPases of the Rho and **ADP-ribosylation** factor (ARF) family, are implicated in the regulation of lipid kinases, including PtdIns 4-kinases and PtdIns(4)P 5-kinases. Here, we describe a PtdIns 4-kinase activity on immature secretory granules (ISGs), regulated secretory organelles formed from the trans-Golgi network (TGN), and investigate the regulation of PtdIns4P levels on these membranes. Over 50% of the PtdIns 4-kinase activity on ISGs is inhibited by both a low concn. of adenosine and the monoclonal antibody 4C5G, a specific **inhibitor** of the type II PtdIns 4-kinase. Treatment of ISGs with mastoparan 7 (M7) stimulates the type II PtdIns 4-kinase via pertussis-toxin-sensitive Gi/GO proteins, which, in contrast with previous results obtained with chromaffin granules, does not require Rho A, B or C. M7 treatment also leads to an inhibition in the recruitment of ARF to ISG membranes: this inhibition is not dependent on

Gi/G0 activation, and is not linked to the stimulation of PtdIns 4-kinase obsd. with M7. PtdIns 4-kinase activity on ISGs is not regulated by myristoylated ARF1-GTP, in contrast with results obtained with Golgi membranes, whereas ARF1-GTP does regulate the prodn. of PtdIns(4,5)P2. Our results suggest that the regulation of PtdIns 4-kinase on the ISGs differs in comparison with that on the TGN, and might be related to a specific requirement of ISG maturation.

=> file medline

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	56.68	56.89

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-6.82	-6.82

FILE 'MEDLINE' ENTERED AT 08:52:37 ON 16 MAY 2002

FILE LAST UPDATED: 15 MAY 2002 (20020515/UP). FILE COVERS 1958 TO DATE.

On April 22, 2001, MEDLINE was reloaded. See HELP RLOAD for details.

MEDLINE now contains IN-PROCESS records. See HELP CONTENT for details.

MEDLINE is now updated 4 times per week. A new current-awareness alert frequency (EVERYUPDATE) is available. See HELP UPDATE for more information.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2001 vocabulary. Enter HELP THESAURUS for details.

The OLDMEDLINE file segment now contains data from 1958 through 1965. Enter HELP CONTENT for details.

Left, right, and simultaneous left and right truncation are available in the Basic Index. See HELP SFIELDS for details.

THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE SUBSTANCE IDENTIFICATION.

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L3          768 S L2 AND ADP
L4           48 S L3 AND COMPOSITION
L5            0 S L4 AND DIPTHERIA
L6           12 S L4 AND TREATMENT
L7            0 S L5 AND DIPHTHERIA
L8            1 S L6 AND DIPHTHERIA
L9            6 S L6 AND PERTUSSIS
L10           1 S L6 AND TETANUS
L11           0 S L6 AND INFECTION
L12           1 S L4 AND ENTEROTOXIN
L13           1 S L4 AND PROANTHOCYANIDIN
L14           1 S L3 AND PROANTHOCYANIDIN
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                (INHIBITOR OR INHIBITORS)

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         418623 INHIBITORS
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           3881 RIBOSYLATION
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 => s l3
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          30736 ADP
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         125309 COMPOSITION
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            141 PROANTHOCYANIDINS
            201 PROANTHOCYANIDIN
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            21 RIBOSYLATIONS
          3881 RIBOSYLATION
                 (RIBOSYLATION OR RIBOSYLATIONS)
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            37 ADPS
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                 (ADP OR ADPS)
L23          1 L21 AND ADP

=> dis l23 bib abs

L23  ANSWER 1 OF 1     MEDLINE
AN   2001526606     MEDLINE
DN   21228268   PubMed ID: 11330834
TI   Differential effects of IH636 grape seed proanthocyanidin
     extract and a DNA repair modulator 4-aminobenzamide on liver microsomal
     cytochrome 4502E1-dependent aniline hydroxylation.
AU   Ray S D; Parikh H; Hickey E; Bagchi M; Bagchi D
CS   Department of Pharmacology, Toxicology and Medicinal Chemistry, Arnold &
     Marie Schwartz College of Pharmacy and Health Sciences, Long Island
     University, Brooklyn, New York 11201, USA.. sray@liu.edu
SO   MOLECULAR AND CELLULAR BIOCHEMISTRY, (2001 Feb) 218 (1-2) 27-33.
     Journal code: NGU; 0364456. ISSN: 0300-8177.
CY   Netherlands
DT   Journal; Article; (JOURNAL ARTICLE)
LA   English
FS   Priority Journals
EM   200109
ED   Entered STN: 20011001
     Last Updated on STN: 20011001
     Entered Medline: 20010927
AB   Previous studies from our laboratories have linked the protective
     abilities of IH636 grape seed proanthocyanidin extract (GSPE)
     with inactivation of anti-apoptotic gene bcl-XL, and modification of
     several other critical molecular targets such as DNA-damage/DNA-repair,
     lipid peroxidation and intracellular Ca2+ homeostasis. Especially, GSPE
     provided dramatic protection against acetaminophen (APAP)-induced
     hepatotoxicity, significantly increased bcl-XL expression in the liver,
     and antagonized both necrotic and apoptotic deaths of liver cells in vivo.
     However, it was not clear from this study whether anti-apoptogenic and
     anti-necrotic effects of GSPE were: (i) due to its interference with
     endonuclease activity, (ii) due to its antioxidant effect, or, (iii) due
     to its ability to inhibit microsomal drug metabolizing enzyme(s), such as
     CYP-4502E1. Since CYP-4502E1 primarily metabolizes acetaminophen in mice
     and rats, this study specifically focused on CYP-4502E1's catalytic
     activity in vitro. Overall this investigation compared the in vitro
     aniline hydroxylation patterns of: (i) in vivo GSPE-exposed and unexposed
     (control) mouse liver microsomes, (ii) induced (1% acetone in drinking
     water for 3 days) and uninduced rat liver microsomes in the presence and
     absence of GSPE in vitro, and (iii) control rat liver microsomes in the
     presence of an anti-APAP agent 4-aminobenzamide (4-AB) in vitro. For the
     in vivo assessment, male B6C3F1 mice were fed GSPE diet (ADI 100 mg/kg
     body wt) for 4 weeks, and liver microsomes were isolated from both control
     and GSPE-fed mice for aniline hydroxylation, a specific marker of
     CYP-4502E1 activity. Data show that hydroxylation was 40% less in
     microsomes from GSPE-exposed livers compared to control microsomes.
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Similarly, when rat liver microsomes were incubated with various concentrations of GSPE in vitro (100 and 250 microg/ml), aniline hydroxylation was inhibited to various degrees (uninduced: 40 and 60% and induced: 25 and 50%, respectively with 100 and 250 microg/ml). Influence of GSPE on hydroxylation patterns were compared with another hepatoprotective agent 4-aminobenzamide (4-AB), a well-known modulator of nuclear enzyme poly(**ADP**-ribose) polymerase, and the data shows that 4-AB did not alter aniline hydroxylation at all. Collectively, these results may suggest that GSPE has the ability to inhibit CYP-4502E1, and this is an additional cytoprotective attribute, in conjunction with its novel antioxidant and/or antiendonucleolytic potential.

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     (FILE 'HOME' ENTERED AT 08:38:59 ON 16 MAY 2002)

     FILE 'CAPLUS' ENTERED AT 08:39:13 ON 16 MAY 2002
L1        619425 S INHIBITOR
L2           835 S L1 AND RIBOSYLATION
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L4            48 S L3 AND COMPOSITION
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L7             0 S L5 AND DIPHTHERIA
L8             1 S L6 AND DIPHTHERIA
L9             6 S L6 AND PERTUSSIS
L10            1 S L6 AND TETANUS
L11            0 S L6 AND INFECTION
L12            1 S L4 AND ENTEROTOXIN
L13            1 S L4 AND PROANTHOCYANIDIN
L14            1 S L3 AND PROANTHOCYANIDIN

     FILE 'MEDLINE' ENTERED AT 08:52:37 ON 16 MAY 2002
L15       508108 S L1
L16          979 S L2
L17          954 S L3
L18            4 S L4
L19            0 S L18 AND PROANTHOCYANIDIN
L20            0 S L17 AND PROANTHOCYANIDIN
L21          201 S PROANTHOCYANIDIN
L22            0 S L21 AND RIBOSYLATION
L23            1 S L21 AND ADP

=> s bacterial
          348875 BACTERIAL
               8 BACTERIALS
L24       348876 BACTERIAL
                 (BACTERIAL OR BACTERIALS)

=> s l24 and infection
          393371 INFECTION
          450129 INFECTIONS
          674407 INFECTION
                 (INFECTION OR INFECTIONS)
L25       120039 L24 AND INFECTION

=> s l25 and enterotoxin
            7398 ENTEROTOXIN
            8385 ENTEROTOXINS
            9792 ENTEROTOXIN
                 (ENTEROTOXIN OR ENTEROTOXINS)
L26         1390 L25 AND ENTEROTOXIN

=> s l26 and treatment
```

```
        1376847 TREATMENT
          86934 TREATMENTS
        1412705 TREATMENT
                  (TREATMENT OR TREATMENTS)
L27         100 L26 AND TREATMENT

=> s l27 and proanthocyanidin
            146 PROANTHOCYANIDIN
            141 PROANTHOCYANIDINS
            201 PROANTHOCYANIDIN
                  (PROANTHOCYANIDIN OR PROANTHOCYANIDINS)
L28           0 L27 AND PROANTHOCYANIDIN

=>

---Logging off of STN---


=>
Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY      SESSION
FULL ESTIMATED COST                                    4.38        61.27

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                      ENTRY      SESSION
CA SUBSCRIBER PRICE                                    0.00        -6.82

STN INTERNATIONAL LOGOFF AT 08:59:10 ON 16 MAY 2002
```